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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,234	08/08/2006	Hazem El-Refaey	BBD.P0022	1287

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EXAMINER	
PESELEV, ELLI	
ART UNIT	PAPER NUMBER
1623	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/563,234	EL-REFAEY, HAZEM
	Examiner	Art Unit
	ELLI PESELEV	1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)	
1) ☐ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) ☐ Other: _____.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 22, 2010 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 40-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerscher et al (U.S. Patent No. 6,899,890) in combination with Herschler (U.S. Patent No. 4,997,823) and Kelly (WO 02/092097).

Kirscher et al disclose a vaginal drug delivery method (column 5, lines 34-44) suitable for delivery of therapeutic drugs. Kirscher et al also disclose that the therapeutically active drug or drugs may be any of those which are used for the treatment of vagina, including antibacterial agents (column 12, lines 62-65), such as azithromycin or metronidazole (column 13, lines 30-31). Kirscher et al further disclose a method for treating vaginal infection (column 114, lines 58-67). Kirscher et al do not specifically disclose the administration of an antibiotic azithromycin in combination with a prostaglandin misoprostol. However, since a composition comprising an antibiotic in a combination with a prostaglandin was known in the prior art at the time of the claimed

invention to be useful for treating infections as disclosed by Herschler (column 2, lines 13-60) and the vaginal delivery of prostaglandins, such as misoprostol was also known at the time of the claimed invention as disclosed by Kelly (page 6), it would have been prima facie obvious to a person of ordinary skill in the art at the time of the claimed invention to administer vaginally a combination of an antibiotic azithromycin in combination with a prostaglandin misoprostol because such a person would have had a reasonable expectation that the resulting combination would be useful for treating pelvic tissue infection.

Applicant's arguments filed November 2010 have been fully considered but they are not persuasive.

Applicant contends that the combined delivery of about 250 milligrams to about 1000 milligrams of azithromycin and 50 micrograms to about 1000 micrograms of misoprostol achieves a synergistic effect which results in higher than expected concentrations of azithromycin being absorbed in vaginal tissue. Applicant admits that the Examples in the specification relate to a formulation of 500 milligrams of azithromycin and 400 micrograms of misoprostol. However, applicant argues that as stated in declaration, the synergistic effect between azithromycin and misoprostol is believed to derive from collagenolytic activity of misoprostol on vaginal tissue. Applicant's arguments and the declaration submitted have been considered but has not been found persuasive since no evidence has been presented that collagenolytic activity of misoprostol in the range of about 5 micrograms to about 1000 micrograms in combination with azithromycin in the range of about 250 milligrams to about 1000

milligrams would result in synergism. The articles by Fittkow et al and Ekman et al, submitted by applicant, have been considered. Said articles show that prostaglandins such as misoprostol have collagenolytic activity which resulted is shorter time of cervical dilation. Said article do not provide any suggestion that collagenolytic activity of a prostaglandin would result in a synergistic composition when administered in combination with antibiotic for the treatment of pelvic tissue infections.

Applicant also contends that MPEP states applicant is not required to show unexpected results over the entire range of properties by a chemical compound or a composition. The applicant has provided evidence of synergism between 500 milligrams of azithromycin and 400 micrograms of misoprostol. Based on said evidence, a person having ordinary skill in the art at the time of the present invention would not have had a reasonable expectation that a combination of 1000 milligrams of azithromycin and 50 micrograms of misoprostol or a combination of 250 milligrams of azithromycin and 1000 micrograms of misoprostol would also result in synergism. As shown by Ekman et al, collagenolytic activity of prostaglandin was known in 1986, well before the present invention. However, it has not been shown by the articles submitted or the applicant that said activity is responsible for synergism when a prostaglandin is administered in combination with an antibiotic. Therefore, the claimed methods are still deemed prima facie obvious over the cited prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLI PESELEV whose telephone number is (571)272-0659. The examiner can normally be reached on 8.00-4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elli Peselev
/Elli Peselev/
Primary Examiner, Art Unit 1623